

## **THE REGULATION FOR MASTER AND Ph.D DEGREE PROGRAM**

### **at the MONGOLIAN TECHNICAL UNIVERSITY OF SCIENCE AND TECHNOLOGY**

#### **ONE. GENERAL PROVISIONS**

- 1.1 Based on the Order No. 187 of the Minister of Education, Culture and Science of Mongolia of 2007, the "General Regulations for Master's and Doctoral Degree's Education", "The Rule of the Committee for Master's Degree", "The Rule of the Committee for Doctor's Degree" of the Minister of Education, Culture and Science, that rule will be regulate the Master's degree and Doctor's degree education, the recruitment students for master's degree and Ph.D. degree, building a learning environment, the regulation of the semester's load for students of master's degree and Ph.D. degree (hereafter called as a master's or doctoral degree), regulate the degree holding activity for master's degree and Ph.D. degree etc.
- 1.2 Any issues that are not coordinated by this regulation shall be discussed at the Rector's Council meeting of the Mongolian University of Science and Technology at each time and to make relevant decisions
- 1.3 The academic activities shall be divided into two main semesters: autumn and spring. Besides, summer and winter semesters, and correspondence courses shall be organized. The duration of the spring and autumn semester is 16 weeks and the duration of the semester examinations is 2 weeks.
- 1.4 One hour of a course is 45 minutes and the two-hour course shall be 90 minutes without a break in between.
- 1.5 Council of Teaching Methodology, which shall be in charge of giving methodological advises to the academic activities, shall be established in all branch schools upon the order of the Rector.

#### **TWO. THE MASTER DEGREE AND PH.D DEGREE PROGRAMS**

- 2.1 Master's and Ph.D. degree's programs have a directive of research and development.
- 2.2 The duration for the master degree program is 1-2 years and the duration for PhD degree program shall be 2-4 years.
- 2.3 The Master's and Doctorate (Ph.D.) courses are in form of full time study and distance learning, and each have its approved program.
- 2.4 The academic year for the Master's and Doctor's Degree program is comprised of three semesters, autumn, spring and summer semester. The autumn and the spring semesters are continued not less than 15 weeks. The summer semester consists of not less than 4 weeks. The academic year for Master's and Doctor's Degree program starts on the Monday of the last week of August. It called as "0" week, and education course organized in accordance with the integrated calendar.

- 2.5 The master's and doctor's degree student must sign on the study contract within the first week of the semester, pay the tuition fee within the period specified in the contract, and choose the courses within the specified period by integrated calendar.
- 2.6 Students who have registered as the graduate student and studying with the performance of GPA of 3.0 or more can choose the courses that are offered in master's degree basic programs within up to 10 credits courses while taking other final bachelor degree graduation courses. These course credits can be calculated towards the master's degree program credits if the student is enrolled in the master's degree program.
- 2.7 If, the master or Ph.D. degree student entered to the Master's or Ph.D. degree course that is from different field, he or she is required to take certain mandatory courses required in order to satisfy the priorities for the training content by the decision of the professors' team and the advisory committees the resolution. The total credits of the discrepancy mandatory courses shall be not less than 21 credits and not exceed 60 credits. It shall not be counted towards the main courses of the Master's or Doctoral Degree courses. The assessment of the mandatory courses will be recorded in the diploma annex of the Master's or Ph.D. degree program.
- 2.8 The master's degree student, Ph.D. candidates shall to discuss about the his or her study plan and the research work plan with the professor's team and the advisory committee, and to get the approval from the research leader and will be follow it. The plan shall specifically specify the basic courses, the specialized courses to take, define the direction of the thesis, the dissertation, participation in the research seminars, and research work related to the topics, by each semester clearly.

### **THREE. THE MASTER'S TRAINING PROGRAM**

- 3.1 The master's degree program will be held at the branch schools of Mongolian University of Science and Technology (MUST) and basic science courses will be provided under the supervision of the MDA. Depending on the location of the component institute, the teaching staff, and the material base /the resource/; it is possible to provide the training of some basic academic subjects at the particular institute /school/, by the decision of the vice director who is in charge for the research and technology.
- 3.2 The Master's degree program plan will be developed to deepen the knowledge gained by the bachelor's degree and the training methodology will be based on principles of the research and analysis .
- 3.3 According to the approved program plan, the Master's degree student need to study by following the Master Training Calendar, with a focus on specific research topics, and to do the Master's degree graduation project and to receive the Master's degree.
- 3.4 The courses offered in master's degree program plans have assigned codes. The code consists of 3 letters and 3 digits. The first letter is the school's corresponding code and the next two letters are the professorship team's code. The 3-digit number 700-799 is tells that subjects are for the master's degree course.

- 3.5 The courses offered in the master's degree program will be logically coherent and structurally identifiable that enables students to gain knowledge and skills. The program curriculum is developed and approved according to relevant procedures.
- 3.6 The total content of the Master's degree program is not less than 30 credits, and the master degree student must earn the GPA is 2.8 or above in order to obtain the master's degree.
- 3.7 The status of the master's research work process is reviewed at the end of each semester by the professors' meeting and the students received satisfactory grading, research self-study work credits allocated for the semester shall be considered to be earned.
- 3.8 In accordance with Professors' team proposal and the decision of the component institute /school/ director can select the Master degree program student with best performance and active initiative and will award the student to teach up to 2-credit courses (seminars, laboratories, self-assignments) for the bachelor degree courses. In this case, the student will be exempted from the master degree tuition fee for up to 2 credits.

#### **FOUR. FOREIGN LANGUAGE PROFICIENCY TEST FOR MASTER DEGREE STUDENT**

- 4.1 The master degree student will take a foreign language exam after studying two-thirds of the subjects covered in the curriculum.
- 4.2 The MDA announces the Foreign Language Proficiency Test one month prior to the exam date and records the registration of the master's degree students that are to take the examination and prepare for the exam and manage the process and provide necessary guidance. Foreign Language Proficiency Test for the master's degree student will be offered and organized in each semester.
- 4.3 The Foreign Language Proficiency Testing shall be conducted in accordance with relevant guidelines for the master degree students. The exam will be organized by the Committee with a minimum of 3 members with master's degree and above, in the field of that foreign language.
- 4.4 The Committee members for the Foreign Language Proficiency Exam and the guidelines for the examination shall be approved by the vice director who is in charge of research and the technology.
- 4.5 The fee for the Foreign Language Proficiency Test is equal to the 1 credit for the Master's degree student, in the same academic year. The master degree student shall pay the fee for Foreign Language Proficiency Test to the university's research work account, 21 days prior to the exam.
- 4.6 The successful result from the Foreign Language Proficiency Test is a one of the condition to get the Master's degree. If, the result of the exam is insufficient, by the decision of vice director who is in charge of the research work and the technology, the Master degree holder may re-take the examination in one more time, before the end of the semester. The foreign language exams are not credited to the content of the master's degree education programs.
- 4.7 If the master's degree student holds the valid internationally recognized foreign language certification, then the examination committee shall decide how it will be equivalent to the Foreign Language Proficiency Exams for the Master's degree program. The score from the certificate shall be directly used.

4.8 The examination time of the professor who is the member of Examination Committee for the master's degree student program shall be calculated towards the performance of the professor's annual credit implementation, and the cost for the exam is calculated according to the Credit evaluating regulation of the Mongolian University of Science and Technology.

4.9 The Commission shall send the protocols of the Foreign Language Proficiency Test and the examination related materials to the MDA.

4.10 The Foreign Language Proficiency Test score is included in the master's degree diploma Annex, along with the scores of the all other courses taken by the master's degree student.

## **FIVE. THE IMPLEMENTATION AND DEFENSE OF THE MASTER'S GRADUATION AND THESIS WORK**

5.1 The purpose of the Master's Degree program graduation work (hereinafter referred as Graduation Work) is to gain the theoretical and technical knowledge, to identify the problems that the field of science and technology is facing, to identify problems and to improve the theoretical and methodological knowledge in the science and industrial technology, to improve the industrial technology and to identify the ways to introduce advanced technology in the studied field, to educate and to make the appropriate design, to get the research and development skills in the field of expertise.

5.2 The graduation project will be based on the topics approved by the Rector's Order of the university. The graduation work will be related to the professor's teams research work, design work and the trend of the technology transmission, the order of the factory and business entities.

5.3 The master's degree student who has already accumulated required credits by the program, the supervisor appointment is already approved by the President of the University, and tuition fee is fully paid shall be registered as graduating master degree student.

5.4 The graduation work should be based on the content of the topic and will be used at the high-level of science and technology methodology. The diploma work needs to use modern simulation techniques and be in line with the appropriate norms, standards and procedures.

5.5 The graduation work will be in the written form in Mongolian language, and a brief summary of the research work will be written up to 3 pages in Russian and English languages and will be attached to the graduation project.

5.6 The graduation work shall have the following requirement:

- The main note is will be written on the A4 size paper with, font size shall be 12 pt, using fonts are "Ariel", "Academy", "Times New Roman", "Journal", adjust the line space as 1.2 sp, the left side of the paper is 3cm; the right side of the paper is 2 cm, from the top of the paper-2.5 cm, from the bottom side of the paper is 2.5 cm. Unicode will be used. The page number will be indicated on the center of the bottom side.
- The volume of the diploma work is at least 60 pages.

- Each table and the image shown in the diploma work shall have a name. The table number is in the upper side of the right corner. The title is centered on the top side of the table. The number and title of the drawing shall be in the center of bottom part. The equation number shall be rounded to the rear
- Figures, charts and schemes are made of high quality and clearly compatible with the color harmony and application. Examples include the graphics, charts and diagrams that need to be sorted in color.
- The elements like the title of the chapter, the subtitle, assistant titles, main texts, descriptions and assignments are each of the same design.

5.7 The main interpretation of the Graduation work shall have the following general structure. These include:

- Home page /the First page/
- Abstract
- The Subjects and current levels of research (with relevant references)
- The Methodology
- The results of research work and experiments
- Drafting and Resolution Methods for the Improvement
- General conclusion
- List of sources (Bibliography)
- The Annex

5.8 Preliminary defense of the Master degree's diploma work shall be discussed and decided by the Graduate project committee's meeting which was nominated by the leading professor's resolution

5.9 The master's degree graduates must submit the basic textbook of the graduation work, 7 days before the preliminary defense, and submit it to the professor's team with the description of the research work leader.

5.10 The Preliminary Defense Committee has the right to postpone the defense of the Master's degree diploma work in SP (Satisfactory progress), and NP (No progress) due to the diploma work implementation.

5.11 The Master's degree diploma work with SP's is postponed to one semester for the graduation and 3 credits payment will be paid. If the NP is rated, the defenses will be deferred for 1 year and the student is required to pay 6 credits payment. In this case, the the graduating student needs to re-register in the system.

5.12 The Preliminary Defense Committee shall make all decision on whether or not to place the graduate student for the final stage defense.

5.13 The Master's degree's Defense Committee shall be formed based on the proposal of the supervising professor's team by each professors team at the each institute /school/ and approved that by the President's order. The committee shall consist of not less than 5 members, with the chairman of the committee, deputy chairman, and members. At least one-third of that committee shall be represented by another professor's team and the delegations of the school.

- 5.14 The master degree student must submit the final version of the graduation work in the textbook, with the research work supervising professor's description and other relevant materials (which may have been obtained from a particular organization) to the secretary of that committee.
- 5.15 The critic is appointed by the academic secretary of the school, supervising professors of the professor's team with discussion of related professors. The critics of the graduation work will be selected from the supervising professors of the school. The critic must handle over the review and conclusion on the graduation work and need to submit it to the secretary of the committee before the committee meeting.
- 5.16 The Master's Degree Defense Committee will discuss the master's degree graduation work by each student, and the student will be present the graduation work, the committee's secretary is reading the description of the supervising professor, the recommendation and the reviewer's conclusions to the all.
- 5.17 The graduation work will be evaluated by the supervising professor, critics, preliminary defense committee and the Master degree committee up to 100 points as follows:
- The supervising professor up to 50 points
  - The critic-10+10 points
  - Preliminary defense committee -20+20 points
  - Defense committee -20+20 points
- 5.18 The final evaluation for the Master degree graduation work will be reviewed by the conservation Master degree committee based on the evaluation of the supervising professor, critic, and preliminary defense committee, and the master degree student is responsible for the research work to get the (B-) and above.
- 5.19 Basic textbook of the graduation work and the evaluation sheet should be printed and handed over to the each member. Graduate student will introduce the Master degree diploma work to the Master degree defense committee meeting in 10-15 minutes.
- 5.20 The graduation project's the textbook will be printed in 3 copies and will be deposited in the Central library of the MUST, to the library of the respective school, professor's team. The electronic version of the graduation work will be added to the database of the university's library.
- 5.21 After the distribution of the graduate work to the university's library and adding the electronic version of the graduate work to the database, by the Order of the President, the Master degree diploma will be awarded to the student.